



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,676	10/08/2003	Daniel Peter Ivkovich JR.	125054/11901 (21635-0110)	7687

31450 7590 08/18/2006

MCNEES WALLACE & NURICK LLC  
100 PINE STREET  
P.O. BOX 1166  
HARRISBURG, PA 17108-1166

EXAMINER

MAZUMDAR, SONYA

ART UNIT	PAPER NUMBER
----------	--------------

1734

DATE MAILED: 08/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/681,676

Applicant(s)

IVKOVICH ET AL.

Examiner

Sonya Mazumdar

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2003 and 10 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/8/2003</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, 7, 13, 23, and 24 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 9 of copending Application No. 10/702,801 in view of Duchane et al (US 4,481,999).

Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 7, and 13 of instant application fall within the scope of claim 9 of the copending application or in other words, claims 1, 7, and 13 of the instant application are anticipated by claim 9 of the copending application. Similarly, claims 23 and 24 of instant application falls within the scope of claim 1 of the copending application or in other words, claims 23 and 24 of the instant application are anticipated by claim 1 of the copending application.

Claims 13 and 23 of the instant application recite adhering the optical coating to an article by means of a bonding element, which is taught by claims 1 and 9 of the copending application. It is noted that claims 1 and 9 teach a ceramic-containing bonding element, however the general teaching of a bonding element in claims 13 and 23 of the instant application are met by the teachings of claim 9 of the copending application.

Claim 9 of the copending application is silent as to dissolving a first release system in a solvent to separate the optical coating from the deposition substrate, wherein the first face of the optical coating becomes an exposed free face. However, dissolving a system for separation purposes is well known and conventional as shown for example by Duchane et al. who teach a method of forming a thin unbacked metal foil. The method includes providing a polyvinyl alcohol film (column 4, lines 37-51), vapor deposition a layer of metal foil (column 5, lines 15-16) and the alcohol film and metal coating are immersed together in a water bath to dissolve the alcohol film (column 5, lines 34-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a polyvinyl alcohol substrate and dissolving the substrate to remove the substrate as disclosed by Duchane et al. to provide a 3-dimensional optical coating of any desired shape against the article (column 2, lines 10-12).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 102***

Art Unit: 1734

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4 through 9, 15, 23, and 24 are rejected under 35 U.S.C. 102(b) as being unpatentable by Ross (US 5,830,529).

With respect to claims 1, 4, 5, 6, 7, 15, 23, and 24, Ross discloses method of applying coating to a substrate. The method includes providing a base, i.e. deposition substrate, constructed from disposable material such as water transfer type paper, which would dissolve in water. The base is coated with such materials that are metallic, reflective, holographic, or retroreflective, i.e. an optical coating, and includes a release coating, i.e. release system, such as water slide coating that will dissolve in water (column 9, line 66 - column 10, line 3; column 5, lines 41-63; column 18, lines 47-67; column 19, line 30; column 28, lines 38-39). An adhesive, i.e. bonding element, is applied to one surface of the coating for attachment of the coating from a base to a final or intermediate surface by heat and pressure (column 43, lines 35-43). If the coating is applied to the intermediate surface, the intermediate surface is used to reverse the orientation of the coating during transportation or transposition onto the final surface and the intermediate surface includes a release coating with the final surface includes brass, plaques, glass, or brick (column 23, lines 19-23; column 38, lines 1-22).

Art Unit: 1734

With respect to claims 8 and 9, Ross teaches the intermediate surface includes transfer tape (column 38, lines 8-10). According to Applicant's specification, a release-and-transfer structure may be a polymeric releasable adhesive tape (paragraph 0013).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 1734

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ross as applied to claim 1 above, and further in view of Duchane et al.

Ross fails to teach an organic deposition substrate. Duchane et al disclose a method of forming a thin metal foil on a polyvinyl alcohol film and the alcohol film and metal coating are immersed together in a water bath to dissolve the alcohol film (column 4, lines 37-51; column 5, 34-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a polyvinyl alcohol substrate as taught by Duchane et al. to allow easier dissolution of itself for removal against the optical coating and to provide a 3-dimensional optical coating of any desired shape against the article (column 2, lines 10-12).

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ross as applied to claim 1 above, and further in view of Shaul et al. (US 3,925,138)

The teachings of claim 1 are as described above.

Ross fails to teach applying an aluminum layer as a release system. Shaul et al. teach applying release-coated aluminum foil to a substrate to form a foil clad laminate and later treating the laminate with a solution to dissolve the aluminum foil layers (column 2, line 59; column 3, lines 32-34; column 7, lines 18-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply an aluminum foil as a release system as Shaul et al. taught because aluminum foil would not form a strong adhesive bond with most substrates and is preferred for economical purposes.

Art Unit: 1734

8. Claims 10 through 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ross as applied to claim 1 above, and further in view of Conolly (US 4,623,087).

The teachings of claim 1 are described as above.

With respect to claim 10, Ross as disclosed above is silent as to the device substrate is a gas turbine engine. Conolly discloses a method of applying an optical coating by ways of a carrier to articles such as a turbine blade or combustion chamber for a gas turbine engine (column 2, lines 7- 10 and lines 36-39; column 3, lines 38-42)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an optical coating to a component of a gas turbine engine as disclosed by Conolly to provide a thermal barrier material to the engine components (column 2, lines 11-14).

With respect to claims 11 and 12, although Conolly does not expressly teach furnishing a new-make or repaired article's surface to receive an optical coating, where Applicant's specification defines a new-make article as one that has not previously been in service, Conolly teaches applying an optical coating to an article, which may be newly manufactured or repaired, to achieve a certain characteristic. And therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to apply an optical coating to an article as Conolly taught to the method disclosed by Ross.

9. Claims 13, 16-18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ross as applied to claim 1 above, and further in view of Hankland (U.S. 4,407,685).

The teachings of claim 1 are as described above.



Art Unit: 1734

Ross does not specifically teach heating and pressing to affixing the coating to the article using an autoclave. Hankland teaches a method of transferring an optical coating, which includes placing an composite of a carrier member with the optical coating and the article to be coated into an autoclave with an adhesive element as a component of the article, then heating and pressing to cure the adhesive (column 3, lines 16-22, lines 43-46, and lines 54-61; column 4, lines 25-33).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide use an autoclave to affix a metal coating with heating and pressing as disclosed by Hankland to provide a method of coating surface such as curved surfaces in a one step process (column 1, lines 54-57).

10. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ross as applied to claim 1 above, and further in view of Alexander (U.S. 3,654,016).

Ross does not teach affixing the coating to the article with ironing. Alexander teaches a method of adhering foil to a surface, which includes providing a foil, i.e. optical coating, on a carrier member and ironing the foil onto the substrate with heat and pressure and removing the carrier member (column 2, lines 53-60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply a coating on a carrier member to an article by ironing as taught by Alexander to provide method of applying foil to an article with greatly reduce waste (column 1, lines 54-56).

11. Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ross as applied to claim 1 above, and further in view of Oliva (U.S. 4,153,494).

Ross does not teach bonding the adhesive to the article surface and thereafter bonding the optical coating to the adhesive. Oliva discloses a method of metallizing surfaces, which includes applying an adhesive or cement to either the surface of the article, or the surface of the metallic coating (column 2, lines 15-20, lines 24-28, and lines 42-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to applying the adhesive to the surface of the article as disclosed by Oliva as an alternative and equivalent method of bonding an optical coating to an article.

12. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ross in view of Duchane et al. and Hankland.

Ross discloses method of applying coating to a substrate. The method includes providing a base, i.e. deposition substrate, constructed from disposable material such as water transfer type paper, which would dissolve in water. The base is coated with such materials that are metallic, reflective, holographic, or retroreflective, i.e. an optical coating, and includes a release coating, i.e. release system, such as water slide coating that will dissolve in water (column 9, line 66 - column 10, line 3; column 5, lines 41-63; column 18, lines 47-67; column 19, line 30; column 28, lines 38-39). An adhesive, i.e. bonding element, is applied to one surface of the coating for attachment of the coating from a base to a final or intermediate surface by heat and pressure (column 43, lines 35-43). If the coating is applied to the intermediate surface, the intermediate surface is used to reverse the orientation of the coating during transportation or transposition onto the final surface and the intermediate surface includes a transfer tape (column 38,

Art Unit: 1734

lines 8-10). According to Applicant's specification, a release-and-transfer structure may be a polymeric releasable adhesive tape (paragraph 0013). The final surface includes brass, plaques, glass, or brick (column 23, lines 19-23; column 38, lines 1-22).

Ross fails to teach an organic deposition substrate. Duchane et al disclose a method of forming a thin metal foil on a polyvinyl alcohol film and the alcohol film and metal coating are immersed together in a water bath to dissolve the alcohol film (column 4, lines 37-51; column 5, 34-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a polyvinyl alcohol substrate as taught by Duchane et al. to allow easier dissolution of itself for removal against the optical coating and to provide a 3-dimensional optical coating of any desired shape against the article (column 2, lines 10-12).

Also, Ross does not specifically teach heating and pressing to affixing the coating to the article. Hankland teaches a method of transferring an optical coating, which includes placing an composite of a carrier member with the optical coating and the article to be coated into an autoclave with an adhesive element as a component of the article, then heating and pressing to cure the adhesive (column 3, lines 16-22, lines 43-46, and lines 54-61; column 4, lines 25-33).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide use an autoclave to affix a metal coating with heating and pressing as disclosed by Hankland to provide a method of coating surface such as curved surfaces in a one step process (column 1, lines 54-57).

Art Unit: 1734

### ***Conclusion***

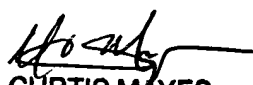
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonya Mazumdar whose telephone number is (571) 272-6019. The examiner can normally be reached on 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



SM

  
**CURTIS MAYES**  
**PRIMARY EXAMINER**